



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,943	04/07/2004	Robert E. Bicking	H0006398	9724
7590		01/07/2008		
Kris T. Fredrick				
Honeywell International, Inc.				
101 Columbia Rd.				
P.O. Box 2245				
Morristown, NJ 07962				
			EXAMINER	
			AURORA, REENA	
			ART UNIT	PAPER NUMBER
			2862	
			MAIL DATE	DELIVERY MODE
			01/07/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/820,943

Applicant(s)

BICKING, ROBERT E.

Examiner

Reena Aurora

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☒ Claim(s) 1 - 22 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/7/04, 12/29/05</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Conclusion

This application is in condition for allowance except for the following formal matters:

Claim Objections

Claim 1 is objected to because of the following informalities: it is unclear what is meant by the phrase "converts a sensor signal into a discrete level signal" and what is a dynamic DC threshold input. Appropriate correction is required.

Claim 14 is objected to because of the following informalities: it is unclear what is a discrete level signal and what is a startup delayed threshold input. Appropriate correction is required.

Claim 16 is objected to because of the following informalities: it is unclear what is meant by the phrase "converting a sensor signal into a discrete level signal" and what is a specified startup delay. Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 25 USPQ 74, 453 O.G. 213, (Comm'r Pat. 1935).

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter: As to claims 1 – 13, the prior fails to show an AC-coupled detector including a dynamic DC threshold input; and a disable device that inhibits the DC-coupled detector responsive to the dynamic DC threshold input reaching a specified threshold voltage level. These features taken together with the other limitations of the claims render the claims allowable over prior art.

As to claims 14 and 15, the prior fails to show a DC-coupled detector converts the amplified sensor output signal into a discrete level signal that is output from said switched-mode detector, said switched mode detector further having an AC-coupled output mode wherein an AC-coupled detector converts the amplified sensor output signal into a discrete level signal that is output from said switched-mode detector, wherein the output of said switched-mode detector switches from the DC-coupled output mode to the AC-coupled output mode responsive to a startup delayed threshold input reaching a specified voltage level. These features taken together with the other limitations of the claims render the claims allowable over prior art.

As to claims 16 – 22, the prior fails to show an AC-coupled detector for converting the sensor signal into a discrete level signal output from the signal conditioning circuit; and a device that selectively inhibits the discrete level output from said DC-coupled detector after a specified startup delay. These features taken together with the other limitations of the claims render the claims allowable over prior art

Application/Control Number:
10/820,943
Art Unit: 2862

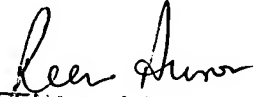
Page 4

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Assouad can be reached on 571-272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Reena Aurora


REENA AURORA
PRIMARY EXAMINER
TECHNOLOGY CENTER 2800